

## IMAGE OF THE MONTH

## Popcorn in the Lung

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A 65-year-old man was admitted for breathlessness and dry cough of 3-month duration. He denied any history of cigarette smoking and asbestos exposure. The patient's physical examination revealed reduced breath sounds over middle-upper right hemithorax. The patient's laboratory data and vital signs were normal. A posteroanterior chest radiograph showed a large and well circumscribed pulmonary mass on the right side (Fig. 1). Computed tomography scan confirmed a large, solitary, well delimited, round, inhomogeneous, mass of  $12 \times 8 \times 15$  mm in size in the right upper lobe, with calcifications of a linear, nodular, irregular shape (Fig. 2). There was no mediastinal or hilar lymphadenopathy. The radiological findings were highly suggestive of a giant pulmonary chondroid hamartoma. Through a muscle sparing lateral thoracotomy, a right upper lobectomy was performed. Histologic examination yielded a well circumscribed hamartoma with predominantly benign chondroid differentiation. The patient was discharged 5 days after surgery. Pulmonary hamartomas are the most common form of benign lung tumors, derived from the peribronchial mesenchyma. The prevalence varies from 0.025% to 0.32% according to different necropsy studies. They are more common in males with a peak incidence in the sixth or seventh decade of life. Pulmonary hamartomas can be divided into parenchymal (90%) and endobronchial (10%) and can be chondromatous or leiomyomatous or a combination thereof.<sup>1</sup> The parenchymal lesions are usually an incidental radiological finding of a round opacity in the periphery of the lung. The presence of calcifications typically dispersed in the form of multiple clumps throughout the lesion in a popcorn configuration can be found in 10–15% of pulmonary hamartomas on chest radiographs.<sup>2</sup> Pulmonary chondroid hamartomas measuring over 10 cm are very rare.<sup>1</sup> Lobectomy is the operation of choice when a giant tumor causes complete replacement of the lobe as in our case.

## REFERENCES

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**FIGURE 1.** Posteroanterior chest radiograph detecting a large and well circumscribed pulmonary mass on the right side with diffuse calcifications.



**FIGURE 2.** Chest computed tomography scan revealing, in the right upper lobe, a large, solitary, and inhomogeneous mass with "popcorn" calcification.

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